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grooves complete and each terminating posteriorly in a deep depression; scutellum rather large, convex, sculptured like the mesoscutum, usually with a broad shallow transverse depression near the middle; axillae broadly separated and sculptured like the scutellum; propodeum shining, more or less weakly reticulated, the median carina distinct but without a foveolate furrow along either side of it, lateral folds represented by very broad deep furrows or depressions which cause that portion of the propodeum between these folds to appear as an elevated area with sharp lateral margins; propodeal spiracles round, the spiracular areas appearing as rather large tubercles or raised areas surrounded by deep grooves; marginal vein longer than submarginal and distinctly somewhat thicker at base than at apex; postmarginal longer than the stigmal; hind coxae dorsally rather coarsely reticulated, laterally and beneath more finely sculptured.

Abdomen conic-ovate, subsessile, about one-fourth longer than the head and thorax together, usually slightly narrower than the thorax, the first, second, third, and fourth tergites weakly reticulated; first, sixth, and seventh tergites subequal in length and each a little longer than any of the other tergites; ovipositor originating at or very near base of abdomen and not extending beyond the apex.

Head, thorax, all coxae, and first tergite bluish green, occiput black; antennal flagellum brownish black, the scape bluish green; mandibles black, with their apices brown; all trochanters, all femora, a band of varying width (sometimes embracing half their length) on the middle and hind tibiae near base, and the anterior and posterior margins of front tibiae, dark bluish to black; knees, all tibiae except as indicated, and all tarsi pale yellow; abdomen except first tergite bronzy black; wings hyaline with the venation dark brown.

Male.—Length 2.5 mm. Similar to the female but with the scape distinctly though not greatly thickened, the flagellum somewhat more tapered toward apex, the club more distinctly separated into two joints, the ocellocular line equal to the diameter of a lateral ocellus, abdomen not longer than the thorax, elliptical in outline, distinctly petiolate, the petiole about as long as broad. The color agrees with that of the female except that the front is deep purplish.

Type-locality.—Fort Collins, Colorado.

Type.-Cat. No. 43262, U. S. N. M.

Host.—Tachypterellus consors Dietz.

Described from eight females and eight males received from GEO. M. LIST of the Colorado Agricultural College with the information that they were reared from the above named curculionid. One paratype of each sex returned to the collector.

HERPETOLOGY.—New Bahaman reptiles.<sup>1</sup> DORIS M. COCHRAN, U. S. National Museum. (Communicated by C. WYTHE COOKE.)

During the summer of 1930 an extensive collecting trip through the Bahama Islands was carried out by Dr. PAUL BARTSCH of the United States National Museum, supported by the WALTER RATHBONE BACON Scholarship Fund. Islands which no naturalist had hitherto visited

<sup>1</sup>Received December 29, 1930. Published by permission of the Secretary of the Smithsonian Institution.

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were explored for the first time scientifically. Excellent series of lizards obtained from many localities have already proved valuable in studies of variation among species which before have been poorly represented in any museum collection.

# Leiocephalus inaguae, new species

Diagnosis.—A distinct lateral fold; four scales (an internasal and three prefrontals) between the rostral and the supraorbital ring; the second prefrontal large and in contact with its fellow; body scales moderately large, 70 to 82 dorsals between occiput and beginning of tail, 16 to 20 in the distance between end of snout and occiput; males with a row of large squarish black blotches on the shoulder region, continuing down the sides and fading out rapidly; faint traces of two more rows of squarish blotches on the back.

Type.—U. S. N. M. Cat. No. 81277, an adult male from Man of War Bay, Great Inagua Island, collected August 8, 1930.

#### Leiocephalus carinatus punctatus, new subspecies

*Diagnosis.*—Closely resembling the Cuban *Leiocephalus carinatus*, but differing from it in having a larger scale at the upper anterior region of the ear as well as in possessing a more vivid color pattern with a somewhat different arrangement of light and dark pigment especially on the head.

Type.—U. S. N. M. Cat. No. 81560 (collector's number 135), a male taken on the north shore of the bay at Jamaica Wells, Acklin Island, July 6, 1930.

### Cyclura carinata bartschi new subspecies

*Diagnosis.*—Nasals broadly in contact with the rostral and with each other; a pair of supranasals also closely in contact with each other; the scales of the prefrontal region quite uniform in size and shape, and grading into the smaller frontal and parietal scales; supraorbital semicircles barely differentiated by an occasional somewhat enlarged scale; scales of the supraocular region distinctly smaller than the other supracephalic scutes; two to four enlarged vertical canthals on each side of the head; nuchal and caudal crests widely separated from the dorsal crest, which is 12 mm. high (in adult males) and is composed of 60 to 73 spines (average in 6 specimens, 63.5); nuchal crest composed of 16 to 20 spines (average 17.1), the highest of which measures 15 mm.; 4 vertical rows of small scales between the fifth and sixth verticils of the tail; 8 supralabials (rarely 9) to a point below the center of the eye; rostral wider than the mental; three to four enlarged tibial scales equaling the vertical diameter of the tympanic membrane.

Type.—U. S. N. M. Cat. No. 81212 (collector's number 172), an adult male from Booby Cay, east of Mariguana Island, Bahamas, collected July 21, 1930.

# Anolis leucophaeus mariguanae, new subspecies

*Diagnosis.*—Similar to *Anolis leucophaeus* Garman, but differing from it in coloration. Ground color drab gray above, lavender-gray beneath, often with a wide clove-brown lateral band which originates on the loreal region, passes through the eye and above the ear, and widens above the shoulder continuing onto the base of the tail and gradually fading out; a light area usually bounding its lower border; a second dark lateral stripe beginning on the malar region just behind the mental, continuing back beneath the ear and

# FEB. 4, 1931 CHITWOOD: SPERMATOZOA IN A NEMATODE

merging in front of the shoulder with the upper lateral stripe in some cases, in other cases widening and suffusing the entire side of the throat and upperarm region with a dusky mottling; skin of gular fan lavender-gray, the scales white or olive-yellow. The young have dark latero-ventral reticulations, and the throat usually has a series of dark longitudinal lines. In adult males the tail fin is large and its upper edge is indistinctly mottled with dark in the region of the rays. Limbs sometimes unmarked, sometimes with wide, irregular dark bars. Scales on limbs a little smaller than in *leucophaeus* proper; scales of tail a little larger.

Type.-U. S. Nat. Mus. Cat. No. 81346, an adult male from Mariguana Cay, taken July 18, 1930.

ZOOLOGY.—Flagellate spermatozoa in a nematode (Trilobus longus).<sup>1</sup>
B. G. CHITWOOD, The George Washington University. (Communicated by PAUL BARTSCH.)

The spermatozoa of nematodes are usually thought of as ameboid, Ascaris having been the example studied for years. Yet Professor



Figure 1. Anterior end of a single sperm; from a section stained with dahlia and eosin.



Figure 2. A test is of a male  $Trilobus\ longus\ showing the flagellate\ spermatozoa. <math display="inline">\times 415.$ 

E. B. WILSON in 1925<sup>2</sup> says "In others such as those of Ascaris, the sperm may be regarded as a much shortened and thickened flagelliform cell with a relatively large amount of cytoplasm and a very short and non-vibratile tail." If his conception is correct, one would expect to find among the free-living nematodes forms in which the spermatozoa retain their tail and are capable of movement.

While examining collections from the beach sand at White Lake, North Carolina, attention was drawn to the rather obvious spermatozoa of *Trilobus longus*. They may be readily seen in living specimens of both male and female. The spermatozoa (Fig. 1) are approximately  $60\mu$  long. The head is blunt and expanding quickly posteriorly, and of oval outline in transverse section. The small nucleus is situated

<sup>&</sup>lt;sup>1</sup> Received November 6, 1930.

<sup>&</sup>lt;sup>2</sup> The cell in development and heredity, p. 298.